GWYNNS FALLS SEWERSHED STUDY SEWER CCTV INSPECTION RESPONSIBILITIES

ATE CREATED: 12/11/07 VERSION: 1.0

URS – Will release work orders for sewer CCTV video inspections to be completed by ADS Environmental Services, Dominion Dynamics Consulting (DDC), Compliance EnviroSystems (CES), and Savin Engineers field crews. Work orders will be released as plat maps; not individual sewer segments. Work will be prioritized for "model" (10 inch diameter and larger) sewers. URS will also coordinate work activities between CCTV subconsultants, maintenance of traffic field crews, QA/QC reviewers and field inspectors.

CCTV Subconsultant (ADS Environmental Services, Dominion Dynamics Consulting, Compliance EnviroSystems, and Savin Engineers) – Will complete sewer CCTV video inspections in accordance with all applicable specifications and provide oncall temporary flow bypass and sewer heavy cleaning services (reference CCTV Invoicing Protocol). All CCTV video inspections will be QA/QC reviewed by the respective CCTV subconsultant. The QA/QC review is not intended to be a comprehensive review of all field data; however, it is the reviewer's responsibility to verify that all required information has been recorded and that the submittal package is complete. At a minimum, the QA/QC review will consist of:

- 1. Preliminary review of all video and audio tracks
- 2. Preliminary review that all defects have been properly identified and assigned an appropriate PACP score
- 3. Preparation and/or confirmation that all required submittal items (i.e. Access database, pdf file of inspection log(s), etc.) are included in the submittal package
- 4. Invoice review and verification that all applicable invoicing information (i.e. volume of debris, water, etc.) is included in the submittal package

The initials of the QA/QC reviewer will be shown in the "Additional info" data field of all inspection logs. Sewer inspections that do not identify the reviewer will not be accepted.

The CCTV Subconsultant will address all review comments. With prior approval from URS, the CCTV Subconsultant may complete all necessary revisions and email the revised data to URS. Unless otherwise directed, the CCTV Subconsultant will follow all standard submission protocol when resubmitting revised data.

Field Crews – Will complete CCTV inspections in accordance with the City's standard CCTV video inspection specification. All inspections shall be completed by competent operators certified by NASSCO in the use of PACP software.



QA/QC Review (George, Miles & Buhr, LLC) – Will complete a comprehensive QA/QC review of all sewer CCTV video inspections and will review all submitted invoices. At a minimum, the QA/QC review will consist of:

- 1. Review of all audio and video tracks
- 2. Review of all defects and assigned PACP scores
- 3. Review of Access databases and inspection logs
- 4. Populate CCTV Review Invoice Summary Table as required
- 5. Review submitted invoices and provide approval/disapproval recommendation

(Note: Final invoice approval/disapproval will be provided by URS)

Items 1 and 2 will be completed by reviewers certified by NASSCO in the use of PACP software. URS will determine the final approval/disapproval of all submissions.

The QA/QC Reviewer will provide review comments and invoice approval/disapproval recommendations to URS. After reviewing the comments and recommendation(s), URS will identify critical outstanding issues and forward the pertinent review comment(s) to the CCTV subconsultant.

Field Inspectors – Will be assigned on an as-needed basis. Field Inspectors will observe the Field Crews activities and report their observations to URS. In general, field inspection observations will include:

- 1. Conformance to applicable OSHA regulations
- 2. Conformance to generally accepted methods of traffic control
- 3. Identification of field personnel
- 4. CCTV inspection operation
- 5. Evaluation of CCTV inspection operator performance

Field inspections will be performed at the discretion of URS.

General Responsibility

URS will be immediately notified by the Field Crew and/or CCTV Subconsultant Field Manager of field-located catastrophic sewer failures (i.e. active sewer overflows, collapsed sewers with obvious sinkhole, etc.). The Field Crew and/or Field Manager will provide any available documentation (i.e. photographs, video, site location plan, etc.). URS will determine the severity of the failure and, if needed, will report the failure to the Department of Public Works.



Responsibility Identification

URS: Nathan Atkinson CCTV Subconsultant: Ted Nadobny (AI

Ted Nadobny (ADS) David Hardy (CES) Raz Baust (DDC)

Jim Morissey (Savin Engineers)

QA/QC Reviewer: Dale Griffith (GMB)

Mallory Griffin (GMB)

Field Inspectors: Pat O'Keefe (EA Engineering)

